

10692640 6/6/06

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NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JUL 20 Powerful new interactive analysis and visualization software,  
STN AnaVist, now available  
NEWS 4 AUG 11 Derwent World Patents Index(R) web-based training during  
August  
NEWS 5 AUG 11 STN AnaVist workshops to be held in North America  
NEWS 6 AUG 30 CA/Caplus -Increased access to 19th century research documents  
NEWS 7 AUG 30 CASREACT - Enhanced with displayable reaction conditions  
NEWS 8 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
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FILE 'HOME' ENTERED AT 15:20:39 ON 15 SEP 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:20:47 ON 15 SEP 2005

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 SEP 2005 HIGHEST RN 863180-19-2

DICTIONARY FILE UPDATES: 14 SEP 2005 HIGHEST RN 863180-19-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

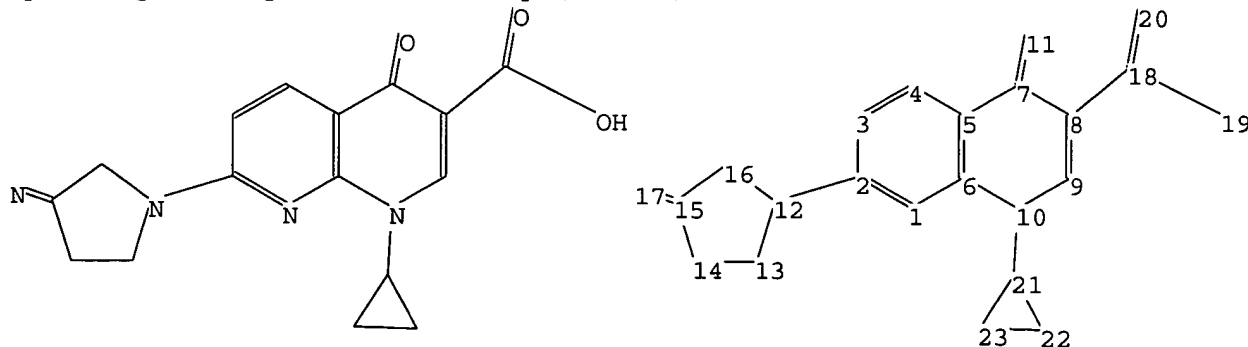
Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10070281.str



chain nodes :

11 17 18 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 21 22 23

chain bonds :

2-12 7-11 8-18 10-21 15-17 18-19 18-20

ring bonds :

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1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 12-13 12-16 13-14 14-15  
15-16 21-22 21-23 22-23

exact/norm bonds :

2-12 5-7 6-10 7-8 7-11 8-9 9-10 10-21 12-13 12-16 15-17 21-22 21-23  
22-23

exact bonds :

8-18 13-14 14-15 15-16

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 18-19 18-20

isolated ring systems :

containing 12 :

Match level :

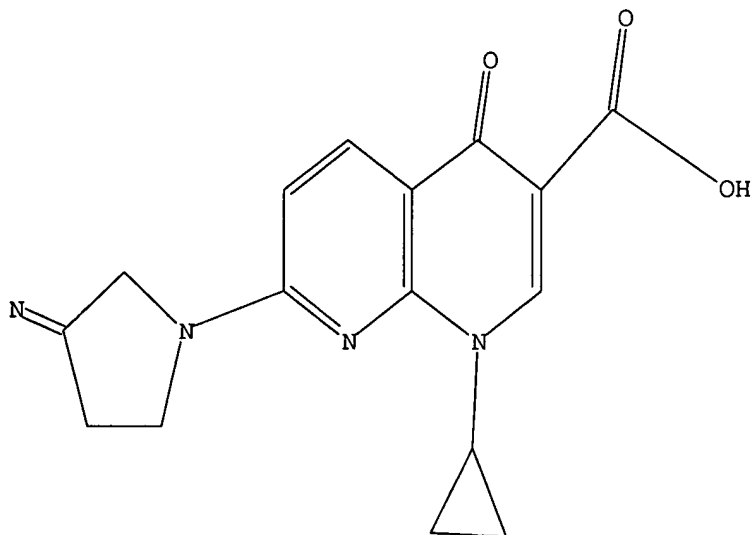
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS  
20:CLASS 21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 full

FULL SEARCH INITIATED 15:21:09 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1665 TO ITERATE

100.0% PROCESSED 1665 ITERATIONS

SEARCH TIME: 00.00.01

92 ANSWERS

L2 92 SEA SSS FUL L1

10692640 6/6/06

=> s 12 full

FULL SEARCH INITIATED 15:24:37 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1665 TO ITERATE

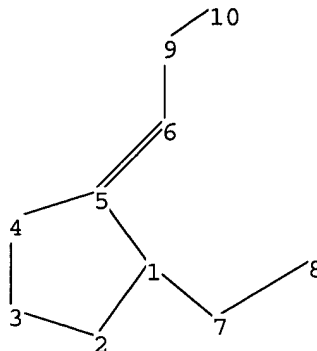
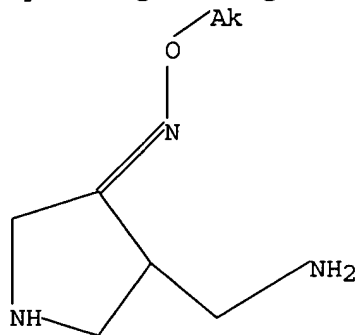
100.0% PROCESSED 1665 ITERATIONS  
SEARCH TIME: 00.00.01

92 ANSWERS

L3 92 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\100702811.str



chain nodes :

6 7 8 9 10

ring nodes :

1 2 3 4 5

chain bonds :

1-7 5-6 6-9 7-8 9-10

ring bonds :

1-2 1-5 2-3 3-4 4-5

exact/norm bonds :

2-3 3-4 5-6 6-9 7-8 9-10

exact bonds :

1-2 1-5 1-7 4-5

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS

L4 STRUCTURE UPLOADED

=> s 14

SAMPLE SEARCH INITIATED 15:25:01 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 24 TO ITERATE

100.0% PROCESSED 24 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

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	BATCH	**COMPLETE**
PROJECTED ITERATIONS:	187 TO	773
PROJECTED ANSWERS:	2 TO	124

L5 2 SEA SSS SAM L4

=> s l4 full  
FULL SEARCH INITIATED 15:25:09 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 580 TO ITERATE

100.0% PROCESSED	580 ITERATIONS	62 ANSWERS
SEARCH TIME: 00.00.01		

L6 62 SEA SSS FUL L4

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	485.71	485.92

FILE 'CAPLUS' ENTERED AT 15:25:16 ON 15 SEP 2005  
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FILE COVERS 1907 - 15 Sep 2005 VOL 143 ISS 12  
FILE LAST UPDATED: 14 Sep 2005 (20050914/ED)

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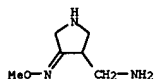
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2 and l6  
348 L2  
20 L6  
L7 14 L2 AND L6

=> d ibib abs hitstr tot

10692640 6/6/06

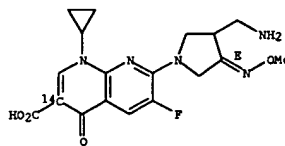
L7 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:953900 CAPLUS  
 DOCUMENT NUMBER: 142:219455  
 TITLE: Synthesis of carbon-14 labeled gemifloxacin  
 AUTHOR(S): Shin, Hyun Il; Rim, Jong Gill; Lee, Ki Seung; Kim, Young Seok; Nam, Do Hyun; Shin, Hyun Ik; Chang, Jay Hyok; Oh, Chang Young; Ham, Won Hun  
 CORPORATE SOURCE: Korea Radiochemicals Center, Suwon, 440-745, S. Korea  
 SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (2004), 47(11), 779-786  
 CODEN: JLCRD4; ISSN: 0362-4803  
 PUBLISHER: John Wiley & Sons Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A new antibacterial agent gemifloxacin was labeled with carbon-14 for studies of pharmacokinetics and metabolism, the label was located in position 3 of the quinolone ring system. The overall radiochem. yield of the 14-step synthesis, starting from [2-14C]sodium acetate was 16.6%, and the radiochem. purity 97.5%.  
 IT 215229-16-6  
 RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis of carbon-14 labeled gemifloxacin from [2-14C]sodium acetate)  
 RN 215229-16-6 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methylloxime, dihydrochloride (9CI) (CA INDEX NAME)



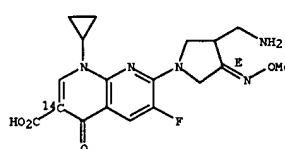
● 2 HCl

IT 840475-05-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis of carbon-14 labeled gemifloxacin from [2-14C]sodium acetate)  
 RN 840475-05-0 CAPLUS  
 CN 1,8-Naphthyridine-3-14C-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)  
 Double bond geometry as shown.

L7 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 840475-06-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of carbon-14 labeled gemifloxacin from [2-14C]sodium acetate)  
 RN 840475-06-1 CAPLUS  
 CN 1,8-Naphthyridine-3-14C-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 840475-05-0  
 CHF C18 H20 F N5 O4  
 Double bond geometry as shown.



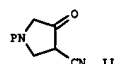
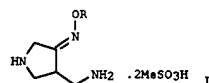
CH 2  
 CRN 75-75-2  
 CHF C H4 O3 S



L7 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:902347 CAPLUS  
 DOCUMENT NUMBER: 141:379800  
 TITLE: Process for preparing 4-aminomethyl-3-alkoxyiminopyrrolidine methanesulfonates from N-protected 4-cyano-3-oxopyrrolidines and (halo)alkoxyamines.  
 INVENTOR(S): Hwang, Gyo-Hyun; Kim, Yeong-Dae; Nam, Hyun; Chang, Jay-Hyok; Shin, Hyun-Ik; Kim, Young-Keun; Lee, Kyung-Hee; Lee, Jae-Sung; Noh, Hyun-Kuk  
 PATENT ASSIGNEE(S): LG Life Sciences Ltd., S. Korea  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092129	A1	20041028	WO 2004-KR476	20040306
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW HW: BW, CH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		KR 2003-14469		A 20030307
OTHER SOURCE(S):		CASREACT 141:379800; MARPAT 141:379800		
G1				



AB Title compds. [I; R = (halo)alkyl], were prepared by treatment of 4-cyano-3-oxopyrrolidines (II; P = protecting group) with a (halo)alkoxyamine (salt) to give the protected oxime-nitriles which were treated with MeSO3H followed by catalytic hydrogenation. Thus, N-BOC-4-cyano-3-oxopyrrolidine was stirred 5 h with MeONH2.HCl and pyridine in MeOH to give 92.8% N-BOC-4-cyano-3-methoxyiminopyrrolidine. The latter was refluxed 30 min. with MeSO3H in MeOH to give 98.8% 4-cyano-3-methoxyiminopyrrolidine methanesulfonate. This was hydrogenated in MeOH over Pd/C at 25° and 500 psig H2 to give 23.1% 4-aminomethyl-3-methoxyiminopyrrolidine methanesulfonate.  
 IT 329181-36-4P  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of aminomethylalkoxyiminopyrrolidine methanesulfonates from

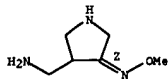
10692640 6/6/06

L7 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
protected cyanooxypyrrolidines and alkoxyamines)  
RN 329181-36-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyl-, (3Z)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 284474-14-2  
CMF C6 H13 N3 O

Double bond geometry as shown.



CH 2

CRN 75-75-2  
CMF C H4 O3 S



IT 175463-14-6P 210353-53-0P 210353-56-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of aminomethylalkoxyiminopyrrolidine methanesulfonates from protected cyanooxypyrrolidines and alkoxyamines)  
RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

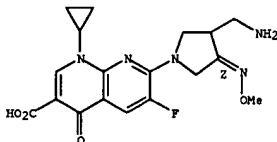
Double bond geometry as shown.

L7 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CH 1

CRN 175463-14-6  
CMF C18 H20 F N5 O4

Double bond geometry as shown.



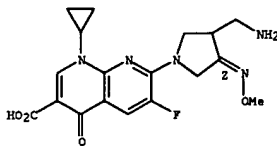
CH 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

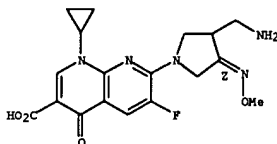


RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 175463-14-6  
CMF C18 H20 F N5 O4

Double bond geometry as shown.



CH 2

CRN 75-75-2  
CMF C H4 O3 S



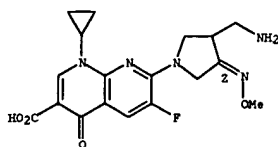
RN 210353-56-3 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, hydrate (2:3) (9CI) (CA INDEX NAME)

L7 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:719302 CAPLUS  
DOCUMENT NUMBER: 141:381357  
TITLE: Synthesis of the Intermediate of Gemifloxacin by the Chemoselective Hydrogenation of 4-Cyano-3-methoxyimino-1-(N-tert-butoxycarbonyl)pyrrolidine. Part 2. The Palladium Catalysts in Acidic Media  
AUTHOR(S): Noh, Hyun Kuk; Lee, Jae Sung; Kim, Yeongdae; Hwang, Gyohyun; Chang, Jay Hyok; Shin, Hyunik; Nam, Do Hyun; Lee, Ryung Hee  
CORPORATE SOURCE: Department of Chemical Engineering and School of Environmental Engineering, Pohang University of Science and Technology (POSTECH), Pohang, 790-784, S. Korea  
SOURCE: Organic Process Research & Development (2004), 8 (5), 788-795  
CODEN: OPREDFX ISSN: 1083-6160  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 141:381357  
AB Chemoselective hydrogenation of 4-cyano-3-methoxyimino-1-(N-tert-butoxycarbonyl)pyrrolidine (CMBP) to 4-aminomethyl-3-2-methoxyiminopyrrolidine methanesulfonate (AMPM), the key intermediate for gemifloxacin, was investigated over Pd catalysts with in situ acid protection. Addition of more than 1.6 equiv of acidic protons for CMBP was found to drastically elevate both the reaction rate and selectivity to 4-aminomethyl-3-2-methoxyimino-1-(N-tert-butoxycarbonyl)pyrrolidine (Z-AMBP) over Pd catalyst with a complete suppression of the major side reaction to 4-cyano-3-amino-1-(N-tert-butoxycarbonyl)-3,4-pyrroline (CABP). Methanol as the organic solvent was found to increase the hydrogenation rate greatly compared to other solvents with a negligible decrease of selectivity. The leaching of Pd by acid and consequent accumulation of Pd ion in the reaction mixture was negligible in CMBP hydrogenation. The novel process of chemoselective CMBP hydrogenation in acidic media over Pd catalyst was thus much simpler yet more efficient compared to the conventional one. The whole AMPM process time starting from 1-(N-tert-butoxycarbonyl)-4-cyanopyrrolidine-3-one (BCPO) could be reduced by at least approx. 15 h which would result in a great reduction of materials such as catalysts, (t-Boc)2O, and solvent. Addnl., reduction of reaction steps improved the overall yield of AMPM significantly. Employment of methanesulfonic acid as an acidic agent in the hydrogenation step allowed an environmentally benign pathway to AMPM by omission of a neutralization step with an extra reduction in process time and materials consumed.  
IT 175463-14-6P, Gemifloxacin 329181-36-4P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(synthesis of intermediate of gemifloxacin by chemoselective hydrogenation of cyanomethoxyimino tertbutoxycarbonylpyrrolidine)  
RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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L7 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

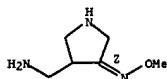


RN 329181-36-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methylxime, (3Z)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 284474-14-2  
CMF C6 H13 N3 O

Double bond geometry as shown.



CH 2

CRN 75-75-2  
CMF C H4 O3 S



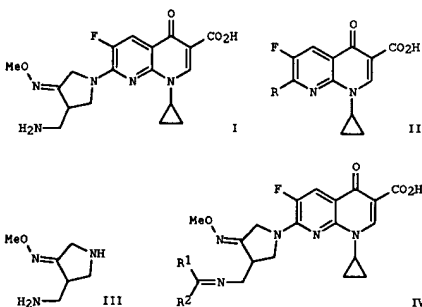
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:837066 CAPLUS  
DOCUMENT NUMBER: 139:337960  
TITLE: Improved two-step process for preparing acid salts of gemifloxacin via Schiff-base protected intermediates  
INVENTOR(S): Choi, Hoon; Choi, Sang-Chul; Nam, Do-Hyun; Choi, Bo-Seung  
PATENT ASSIGNEE(S): LG Life Sciences Ltd., S. Korea  
SOURCE: PCT Int. Appl., 21 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087100	A1	20031023	WO 2003-KR683	20030404
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2003080292	A	20031017	KR 2002-18847	20020408
CA 2481217	AA	20031023	CA 2003-2481217	20030404
EP 1497290	A1	20050119	EP 2003-715805	20030404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009037	A	20050201	BR 2003-9037	20030404
US 2005148622	A1	20050707	US 2003-510514	20030404
PRIORITY APPLN. INFO.:			KR 2002-18847	A 20020408
			WO 2003-KR683	W 20030404
OTHER SOURCE(S):			CASREACT 139:337960; MARPAT 139:337960	
GI				

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB The invention relates to a process for preparing acid salts of gemifloxacin (I), a known quinolone-type antibiotic agent having potent antimicrobial activity. The process provides advantages such as simplicity of process, improvement of productivity, improvement of yield, and the like, by reducing a conventional three-step process to two steps. More specifically, by using a Schiff base-protected intermediate as the product of the first step, and its concomitant hydrolysis during salt formation in the second step, a secondary amine byproduct is avoided, and the normal third step (recrystn.) can be omitted, leading to higher yields and purity. The claimed invention involves preparation of I-HA [HA = organic or inorg. acid] in two steps. In the first step, activated naphthyridine derivs. II react with (aminomethyl)pyrrolidine derivative salts III-2HX and carbonyl compds. R1COR2 in an aqueous and/or organic solvent in the presence of an organic base, to give Schiff base-protected intermediates IV [wherein: R = Cl, F, Br, Iodo, MeSO2, p-MeC6H4SO2; X = Cl, Br, I, CF3COO, MeSO3, p-MeC6H4SO3, or HSO4; R1, R2 = H, (un)saturated (cyclo)alkyl, aromatic group optionally substituted by alkyl, alkoxy, OH, cyano, or halo; or R1R2 form a ring]. In the second step, treatment of IV with acids HA in an aqueous and/or organic solvent gives simultaneous deprotection and salt formation to yield I-HA. Six examples of the first step, and two examples of the second step are given. In the first step, the preferred carbonyl compound is benzaldehyde, in terms of cost and stability. The preferred temperature range is 20-30° in view of reaction rate, yield, and purity. The preferred base is Et3N in terms of cost and yield. High-purity IV may be produced in > 90% yield. In the second step, the preferred solvent is aqueous isopropanol in view of yield and purity. The most suitable acid HA is

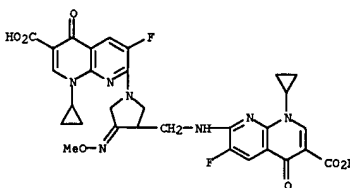
MeSO3H, and the preferred temps. are 40-50° for addition of the acid, and 0-20° thereafter. Compared to the prior art, yields of I-HA are increased from about 65% to > 80%. The process can also be applied to other quinolone antibiotics with structures similar to that of I. For instance, reaction of III-2MeSO3H in aqueous MeCN at

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

0-5°, first with PhCHO and Et3N, and then with II (R = Cl), followed by warming to room temp., gave IV (R1 or R2 = Ph; other = H) in 94.8% yield on a 320-g scale. Hydrolysis of the latter in aq. iso-PrOH by dropwise addn. of MeSO3H at 40-45°, followed by cooling and seeding, gave I.MeSO3H in 95.1% yield.

IT 616827-84-0P  
RL: BYP (Byproduct); PREP (Preparation)  
(avoided byproduct; improved preparation of gemifloxacin acid addition salts via Schiff base-protected intermediates)

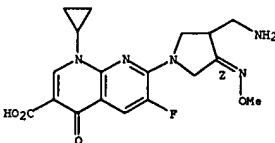
RN 616827-84-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-[(6-carboxy-8-cyclopropyl-3-fluoro-5,8-dihydro-5-oxo-1,8-naphthyridin-2-yl)amino]methyl]-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



IT 175463-14-6DP, Gemifloxacin, organic and inorg. acid addition salts  
210353-53-0P, Gemifloxacin mesylate  
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(improved preparation of gemifloxacin acid addition salts via Schiff base-protected intermediates)

RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-



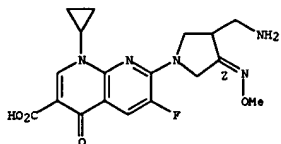
L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-,  
monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 175463-14-6

CMF C18 H20 F N5 O4

Double bond geometry as shown.



CH 2

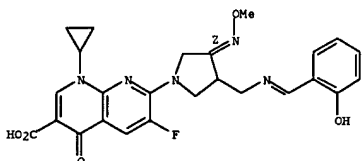
CRN 75-75-2

CMF C H4 O3 S



IT 616827-43-1P, 7-[3-[(Benzyldeneamino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 616827-48-6P, 7-[3-[(2-Chlorobenzylidene)amino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 616827-56-6P, 7-[3-[(2-Hydroxybenzylidene)amino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 616827-53-5P, 7-[3-[(4-Cyanobenzylidene)amino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 616827-70-4P, 7-[3-[(4-Methoxybenzylidene)amino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 616827-77-1P, 7-[3-[(1-Naphthylmethylene)amino)methyl]-4-((Z)-methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate) improved preparation of gemifloxacin acid addition salts  
via

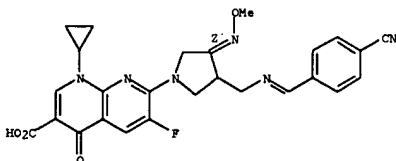
L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 616827-63-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-[[[(4-cyanophenyl)methylene]amino]methyl]-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

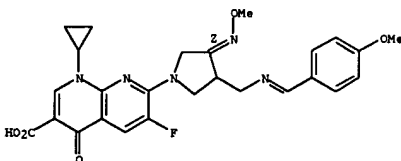
Double bond geometry as described by E or Z.



RN 616827-70-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(3Z)-3-(methoxyimino)-4-[[[(4-methoxyphenyl)methylene]amino]methyl]-1-pyrrolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



RN 616827-77-1 CAPLUS

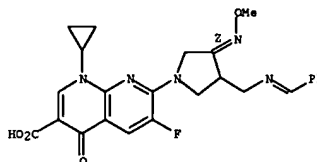
CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(3Z)-3-(methoxyimino)-4-[[[(1-naphthalenyl)methylene]amino]methyl]-1-pyrrolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
Schiff base-protected intermediates)

RN 616827-43-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(3Z)-3-(methoxyimino)-4-[[[(phenylmethylene)amino]methyl]-1-pyrrolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

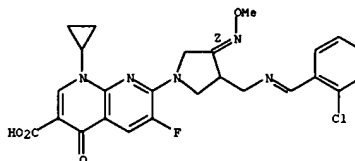
Double bond geometry as described by E or Z.



RN 616827-48-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-[[[(2-chlorophenyl)methylene]amino]methyl]-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

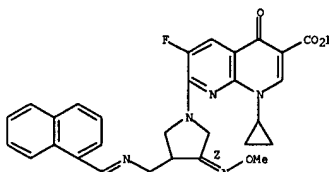


RN 616827-56-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(4Z)-3-[[[(2-hydroxyphenyl)methylene]amino]methyl]-4-(methoxyimino)-1-pyrrolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
Double bond geometry as described by E or Z.



IT 197143-35-4, (Z)-3-(Aminomethyl)-4-(methoxyimino)pyrrolidine

dihydrochloride 329181-36-4, (Z)-3-(Aminomethyl)-4-

(methoxyimino)pyrrolidine methanesulfonate (1:2) 616826-97-2,

(Z)-3-(Aminomethyl)-4-(methoxyimino)pyrrolidine dihydrobromide

616827-05-5, (Z)-3-(Aminomethyl)-4-(methoxyimino)pyrrolidine

dihydrochloride 616827-13-5, (Z)-3-(Aminomethyl)-4-

(methoxyimino)pyrrolidine trifluoroacetate (1:2) 616827-27-1,

(Z)-3-(Aminomethyl)-4-(methoxyimino)pyrrolidine tosylate (1:2)

616827-34-0, (Z)-3-(Aminomethyl)-4-(methoxyimino)pyrrolidine

sulfate (1:2)

RL: RCT (Reactant); RACT (Reactant or reagent)

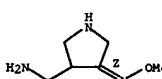
(starting material) improved preparation of gemifloxacin acid addition

salts via Schiff base-protected intermediates)

RN 197143-35-4 CAPLUS

CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dihydrochloride, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● 2 HCl

RN 329181-36-4 CAPLUS

CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CH 1

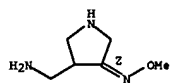
CRN 284474-14-2

CMF C6 H13 N3 O

Double bond geometry as shown.

10692640 6/6/06

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

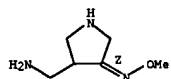


CM 2  
CRN 75-75-2  
CHF C H4 O3 S



RN 616826-97-2 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dihydrobromide, (3Z)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.

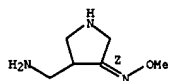


● 2 HBr

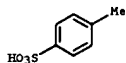
RN 616827-05-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dihydriodide, (3Z)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
Double bond geometry as shown.



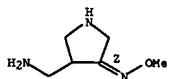
CM 2  
CRN 104-15-4  
CHF C7 H8 O3 S



RN 616827-34-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z)-, sulfate (1:2)  
(9CI) (CA INDEX NAME)

CM 1  
CRN 284474-14-2  
CHF C6 H13 N3 O

Double bond geometry as shown.



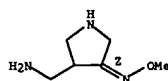
CM 2  
CRN 7664-93-9  
CHF H2 O4 S



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Page 10 saeed

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

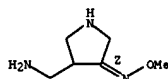


● 2 HI

RN 616827-13-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z)-,  
bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1  
CRN 284474-14-2  
CHF C6 H13 N3 O

Double bond geometry as shown.



CM 2  
CRN 76-05-1  
CHF C2 H F3 O2



RN 616827-27-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z)-,  
bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1  
CRN 284474-14-2  
CHF C6 H13 N3 O

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:117704 CAPLUS

DOCUMENT NUMBER: 138:172243

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

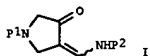
FAMILY ACC. NUM. COUNT: 1

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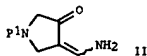
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WO 2003011450	A1	20030213	WO 2002-GB3585	20020802
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1412078	A1	20040428	EP 2002-755123	20020802
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JF 2005500350	T2	20050106	JP 2003-516675	20020802
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GB 2002-17637 A 20020730				
WO 2002-GB3585 W 20020802				

OTHER SOURCE(S): MARPAT 138:172243

GI

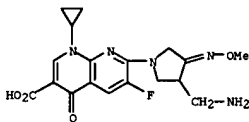


I



II

L7 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CH 2

CRN 75-75-2

CMF C H4 O3 S



IT 329322-83-0P 329322-84-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(processes for production of amino-protected derivs. of 4-aminomethylene-pyrrolidin-3-one gemifloxacin)

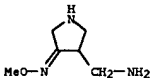
RN 329322-83-0 CAPLUS

CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dimethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 175463-84-0

CMF C6 H13 N3 O



CH 2

CRN 75-75-2

CMF C H4 O3 S

L7 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

AB The invention provides a process for the production of a compound of formula (I); wherein P1 and P2, which may be the same or different, are amino protecting groups, which comprises protection of a compound of formula (II) in solution phase continuous operation mode. This confers advantages over batch mode operation. The process is usually conducted in reaction equipment adapted for use in continuous processing mode, for example comprising one or more static mixers or a plug flow reactor. Preferably, the plug flow reactor comprises a jacketed tubular reactor fitted inside with internal mixing elements which continually split and premix the reaction streams promoting mass and heat transfer, whereby a uniform plug flow profile with turbulent fluid flow is achieved. The invention also provides a process for production of the antibacterial compound

gemifloxacin or a pharmaceutically acceptable salt and/or hydrate thereof, comprising converting a compound of formula (I).

IT 175463-84-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

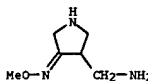
(in production of amino-protected derivs. of

4-aminomethylene-pyrrolidin-3-

one gemifloxacin)

RN 175463-84-0 CAPLUS

CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime (9CI) (CA INDEX NAME)



IT 329322-85-2P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(processes for production of amino-protected derivs. of 4-aminomethylene-pyrrolidin-3-one gemifloxacin)

RN 329322-85-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 329322-84-1

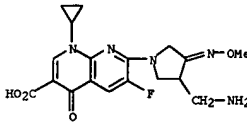
CMF C18 H20 F N5 O4

L7 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 329322-84-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

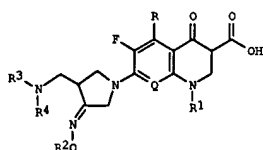


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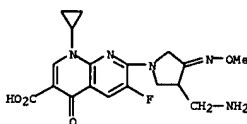
L7 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2001:693322 CAPLUS  
 DOCUMENT NUMBER: 135:242153  
 TITLE: A process for the preparation of pyrrolidino-quinoline-carboxylic acid derivatives (e.g. gemifloxacin) with improved filtration  
 INVENTOR(S): Kim, Bong Chan  
 PATENT ASSIGNEE(S): LG Chem Investment Ltd., S. Korea; Kim, Yeong Dae; Choi, Hoon; Kim, Won Sup  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068649	A1	20010920	WO 2001-KR399	20010314
V: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
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KR 2003017475	A	20030303	KR 2002-711999	20020913
PRIORITY APPL. INFO.:		KR 2000-13011 A 20000315		
OTHER SOURCE(S):		CASREACT 135:242153; MARPAT 135:242153		
GI				

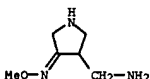


AB The present invention relates to a novel process for preparing quinoline carboxylic acid antimicrobials I (e.g. gemifloxacin) [Q = CH, CF, CCl, COH, COMe, N; R = H, Me, NH<sub>2</sub>; R1 = cyclopropyl, Et, substituted-Ph; R2 = H, alkyl, aryl, allyl; R3, R4 = H, alkyl, or together with the N atom to which they are attached form a cycle]. For instance, Et<sub>3</sub>N, methylcellulose (1.0 weight % relative to pyrrolidine reactant) and 4-aminomethyl-3-methoxymethylpyrrolidine were added sequentially to an aqueous

L7 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



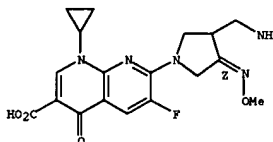
IT 175463-84-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (process for the preparation of pyrrolidino-quinoline-carboxylic acid derivs. (e.g. gemifloxacin) with improved filtration)  
 RN 175463-84-0 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methoxime (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
 soln. of 3-carboxy-7-chloro-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro[1,8]naphthyridine and allowed to stir at room temp. for 16.5 h. The resulting mxt. was filtered on a glass filter and the product washed. Addn. of the surfactant, methylcellulose, resulted in a faster filtration, 5 min vs. 9 min (scale, 34 - 37 g product). Other process parameters evaluated included sequence of addn. of reagents, variation of reaction temp. and surfactant.  
 IT 210353-56-3P 329322-84-1P  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (process for the preparation of pyrrolidino-quinoline-carboxylic acid derivs. (e.g. gemifloxacin) with improved filtration)  
 RN 210353-56-3 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, hydrate (2:3) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 175463-14-6  
 CMF C18 H20 F N5 O4

Double bond geometry as shown.



CH 2  
 CRN 75-75-2  
 CMF C H4 O3 S



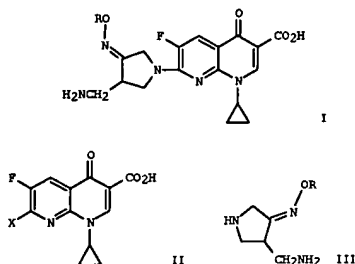
RN 329322-84-1 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2001:185757 CAPLUS  
 DOCUMENT NUMBER: 134:222702  
 TITLE: Process for production of naphthyridine-3-carboxylic acid derivatives  
 INVENTOR(S): Cho, Sungwook; Choi, Hoon; Hayler, John David  
 PATENT ASSIGNEE(S): Sb Pharmco Puerto Rico Inc., USA; Lg Chemical Ltd.  
 SOURCE: PCT Int. Appl., 12 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001018002	A1	20010315	WO 2000-GB3366	20000901
V: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BU, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2383753	AA	20010315	CA 2000-2383753	20000901
BR 2000013751	A	20020507	BR 2000-13751	20000901
EP 1214321	A1	20020619	EP 2000-958776	20000901
EP 1214321	B1	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508532	T2	20030304	JP 2001-522225	20000901
AU 773722	B2	20040603	AU 2000-70197	20000901
AT 271050	E	20040715	AT 2000-958776	20000901
PT 1214321	T	20041029	PT 2000-958776	20000901
ES 2223574	T3	20050301	ES 2000-958776	20000901
KR 2002041421	A	20020601	KR 2002-702869	20020302
ZA 2002001781	A	20030429	ZA 2002-1781	20020304
HK 1047093	A1	20050527	HK 2002-108462	20021121
US 2005176961	A1	20050811	US 2003-692640	20031024
PRIORITY APPL. INFO.:		GB 1999-20917 A 19990903		
		WO 2000-GB3366 W 20000901		
		US 2002-70281 B1 20020521		
OTHER SOURCE(S):		CASREACT 134:222702; MARPAT 134:222702		
GI				

10692640 6/6/06

L7 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

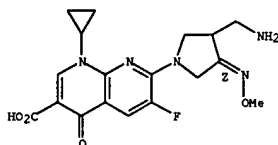


AB Title compds. I (R = alkyl, haloalkyl) were prepared by reaction of II (X = a leaving atom/group) with III or its salt. Thus, 5.1 mL Et<sub>3</sub>N was added to 3.05 g II (X = Cl) in 25 mL water at 15-20°, and the mixture was stirred for 20 min, after which 3.86 g 4-(aminomethyl)-3-(methoxymino)pyrrolidinium dimethanesulfonate was added, followed by 5 mL water, and the mixture was stirred at 20-25° for 17.75 h to give 4.23 g syn-I (R = Me).

IT 175463-14-6P 329181-36-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (production of naphthyridine-3-carboxylic acid derivs.)

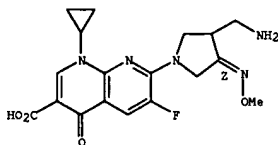
RN 175463-14-6 CAPLUS  
 CN 1,8-naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 329181-36-4 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methoxime, (3Z)-,

L7 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CH 2  
 CRN 75-75-2  
 CMF C H4 O3 S

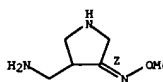


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CH 1  
 CRN 284474-14-2  
 CMF C6 H13 N3 O

Double bond geometry as shown.



CH 2  
 CRN 75-75-2  
 CMF C H4 O3 S



IT 210353-53-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (production of naphthyridine-3-carboxylic acid derivs.)  
 RN 210353-53-0 CAPLUS  
 CN 1,8-naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1  
 CRN 175463-14-6  
 CMF C18 H20 F N5 O4

Double bond geometry as shown.

L7 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

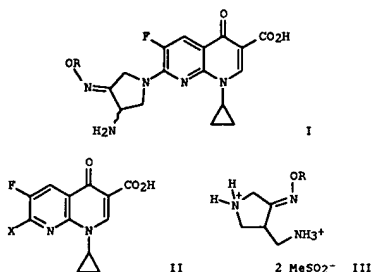
ACCESSION NUMBER: 2001:185719 CAPLUS  
 DOCUMENT NUMBER: 134:222700  
 TITLE: Preparation of intermediates for the production of naphthyridinecarboxylic acid-derivative antibiotics  
 Grinter, Trevor John; Howie, Simon  
 INVENTOR(S): SB Pharmco Puerto Rico Inc., USA  
 PATENT ASSIGNEE(S): PCT Int. Appl., 9 pp.  
 SOURCE: CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001017961	A2	20010315	WO 2000-GB3358	20000901
WO 2001017961	A3	20010920		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, A2, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GM, GW, ML, HR, NE, SN, TD, TG				
CA 2383751	AA	20010315	CA 2000-2383751	20000901
BR 2000013750	A	20020521	BR 2000-13750	20000901
EP 1212321	A2	20020612	EP 2000-956706	20000901
EP 1212321	B1	20040707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
TR 200200548	T2	20020923	TR 2002-200200548	20000901
JP 2003508517	T2	20030304	JP 2001-521708	20000901
NZ 517601	A	20030829	NZ 2000-517601	20000901
AU 773698	B2	20040603	AU 2000-68573	20000901
AT 270671	E	20040715	AT 2000-956706	20000901
ES 2233570	T3	20050301	ES 2000-956706	20000901
NO 2002001043	A	20020301	NO 2002-1043	20020301
ZA 2002001779	A	20030604	ZA 2002-1779	20020304
US 6703512	B1	20040309	US 2002-88149	20020530
HK 1046908	A1	20050527	HK 2002-108460	20021121
US 2004138292	A1	20040715	US 2003-742797	20031223
US 6803467	B2	20041012		
US 2005033064	A1	20050210	US 2004-935357	20040908
PRIORITY APPLM. INFO.:			GB 1999-20919	A 19990903
			WO 2000-GB3358	W 20000901
			US 2002-88149	A3 20020530
			US 2003-742797	A1 20031223

OTHER SOURCE(S): MARPAT 134:222700  
 GI

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L7 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



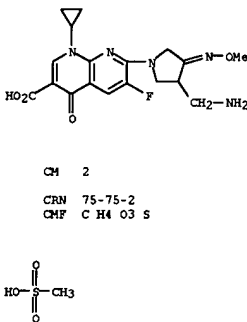
AB Quinolonecarboxylic acid-derivative antibiotics (I; R = C1-4 alkyl, C1-4 haloalkyl) are prepared in high yield and selectivity by the reaction of fluoroquinolonecarboxylic acids (II; X = leaving group) with 4-(aminomethyl)-3-(alkoxyimino)pyrrolidinium dimethanesulfonates (III). Thus, triethylamine was added to 7-chloro-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid, the mixture stirred and 4-(aminomethyl)-3-(methoxyimino)pyrrolidinium dimethanesulfonate added, producing 7-(3-aminomethyl-4-syn-methoxyiminopyrrolidin-1-yl)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid in 86% yield.

IT 329322-83-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of intermediates for the production of naphthyridinecarboxylic acid-derivative antibiotics)  
 RN 329322-83-0 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dimethanesulfonate (9CI) (CA INDEX NAME)

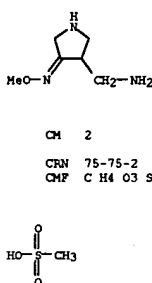
CH 1

CRN 175463-84-0  
 CMF C6 H13 N3 O

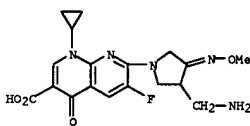
L7 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 329322-84-1P 329322-85-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of intermediates for the production of naphthyridinecarboxylic acid-derivative antibiotics)  
 RN 329322-84-1 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-] (9CI) (CA INDEX NAME)



RN 329322-85-2 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1

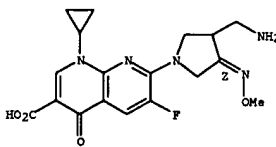
CRN 329322-84-1  
 CMF C18 H20 F N5 O4

L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:344949 CAPLUS  
 DOCUMENT NUMBER: 133:125387  
 TITLE: Direct liquid chromatographic enantiomer separation of new fluoroquinolones including gemifloxacin  
 AUTHOR(S): Lee, W.; Yong Hong, C.  
 CORPORATE SOURCE: LG Chemical Ltd., Taejeon, 305-380, S. Korea  
 SOURCE: Journal of Chromatography, A (2000), 879(2), 113-120  
 CODEN: JCRAEY; ISSN: 0021-9673  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The enantiomers of gemifloxacin mesylate (formerly LB20304a), a new fluoroquinolone compound with potent in vitro and in vivo antibacterial profile were resolved on a com. available Crownpak CR chiral stationary phase (CSP). All of the fluoroquinolones, including gemifloxacin used in this study, were resolved on Crownpak CR(+) column. These results are the first reported for the direct separation of the enantiomers of quinolones on chiral crown ether coated Crownpak CR CSP. The behavior of chromatog. parameters by the change of mobile phase additives for the resolution of gemifloxacin was investigated. Also, the effect of structural change of gemifloxacin on chiral recognition was described.

IT 175463-14-6 197143-43-4 210353-53-0,  
 Gemifloxacin mesylate 210253-54-1 284474-11-9  
 284474-12-0 284474-14-2 284474-15-3  
 284474-17-5 284474-24-4 284474-25-5  
 284474-26-6 284474-29-9 284474-30-2  
 284474-34-6 284474-35-7  
 RL: ANT (Analyte); ANST (Analytical study)  
 (resolution of fluoroquinolones including gemifloxacin by HPLC using chiral crown ether)  
 RN 175463-14-6 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

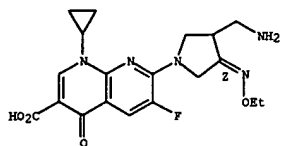


RN 197143-43-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

10692640 6/6/06

L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

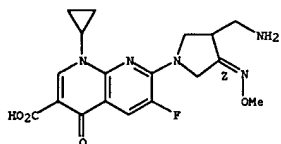


RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 175463-14-6  
CMF C18 H20 F N5 O4

Double bond geometry as shown.



CM 2

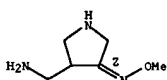
CRN 75-75-2  
CMF C H4 O3 S



RN 210353-54-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

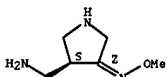
L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
RN 284474-14-2 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



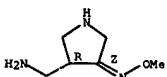
RN 284474-15-3 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 284474-17-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, (3Z,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

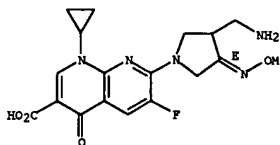


RN 284474-24-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 5-amino-7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

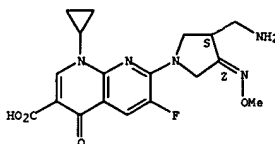
L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Double bond geometry as shown.



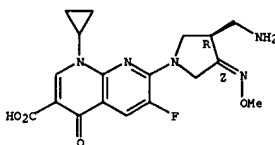
RN 284474-11-9 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3S,4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

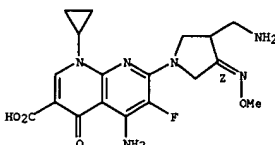


RN 284474-12-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3R,4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

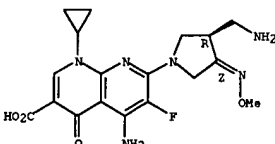


L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



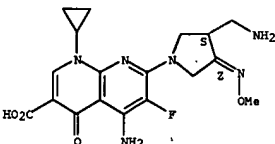
RN 284474-25-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 5-amino-7-[(3R,4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 284474-26-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 5-amino-7-[(3S,4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

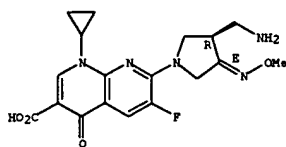


RN 284474-29-9 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3R,4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

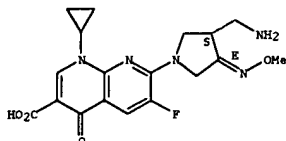
10692640 6/6/06

L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
Double bond geometry as shown.



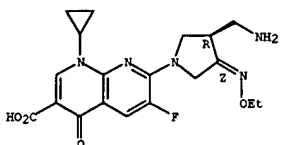
RN 284474-30-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3S,4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 284474-34-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3R,4Z)-3-(aminomethyl)-4-(ethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 284474-35-7 CAPLUS

L7 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1999:576910 CAPLUS  
DOCUMENT NUMBER: 131:201515  
TITLE: Process for preparing a protected 4-aminomethylpyrrolidin-3-one  
INVENTOR(S): Moon, Kwang Yul; Kim, Won Sup; Lee, Tae Hee; Chang, Jay Hyok  
PATENT ASSIGNEE(S): LG Chemical Ltd., S. Korea  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIKX02  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

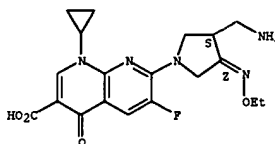
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9944991	A1	19990910	WO 1999-KR99	19990304
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, ER, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GR, GW, GU, ML, MR, NE, SN, TD, TG				
ZA 9901663	A	19990906	ZA 1999-1663	19990302
TW 453993	B	20010911	TW 1999-88103118	19990302
CA 2322540	AA	19990910	CA 1999-2322540	19990304
CA 2322540	C	20041130		
AU 9926433	A1	19990920	AU 1999-26433	19990304
AU 742497	B2	20020103		
BR 9908472	A	20001205	BR 1999-8472	19990304
EP 1068182	A1	20010117	EP 1999-906566	19990304
EP 1068182	B1	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
TR 200002526	T2	20010321	TR 2000-200002526	19990304
JP 2002505322	T2	20020219	JP 2000-534535	19990304
JP 3374155	B2	20030204		
TR 200101800	T2	20020422	TR 2001-200101800	19990304
NZ 506312	A	20020426	NZ 1999-506312	19990304
TR 200101801	T2	20020621	TR 2001-200101801	19990304
NZ 516778	A	20021220	NZ 1999-516778	19990304
AT 297379	E	20050615	AT 1999-906566	19990304
NO 2000004288	A	20001025	NO 2000-4288	20000825
US 6307059	B1	20011023	US 2000-623214	20000830
BG 104767	A	20010531	BG 2000-104767	20000914
			KR 1998-7079	A 19980304
			KR 1998-43636	A 19981019
			WO 1999-KR99	V 19990304

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): HARPAT 131:201515  
GI

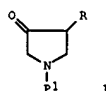
L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3S,4Z)-3-(aminomethyl)-4-(ethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

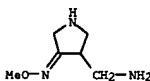


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB Protected 4-aminomethyl-3-pyrrolidinones I (R = CH2NHP2, P1, P2 = protecting groups) are manufactured by hydrogenating I (R = CN, P1 = same as in 1) in the presence of a Raney-nickel catalyst in a solvent, reacting the resulting aminomethylene derivative with a compound to form P2, and selective reduction of the double bond attached to the ring. This process does not cause formation of an OH group at the 3-position, and the products are useful in the manufacture of quinolone antibiotics. Thus, hydrogenating 20 kg 1-(N-tert-butoxycarbonyl)-4-cyano-3-pyrrolidinone in MeOH-NH4OH in the presence of a Raney-nickel catalyst, reacting intermediate with Li tert-butoxide in PhMe at 5-10°, adding di-tert-Bu dicarbonate to complete the reaction, and hydrogenating the 2nd intermediate in ProH 24 in the presence of Bu3N and a Pd catalyst gave I (R = NHCOCH3, P2 = COCH3) quant.  
IT 215229-16-69  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(hydrogenation of cyanopyrrolidinones with Raney nickel in manufacture of protected aminomethylpyrrolidinones)  
RN 215229-16-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

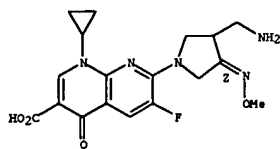
IT 175463-14-6P 210353-53-0P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(manufacture of derivs. of from protected aminomethylpyrrolidinones)  
RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



10692640 6/6/06

L7 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



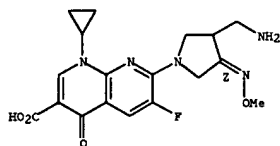
RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 175463-14-6

CMF C18 H20 F N5 O4

Double bond geometry as shown.



CM 2

CRN 75-75-2

CMF C H4 O3 S



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

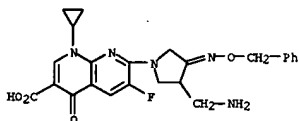
cyclopropylmethyl, alkynyl, 2-haloethyl, methoxymethyl, methoxycarbonylmethyl, aryl, alkyl, (substituted) PhCH2, pyridylmethyl, etc.; R3, R4 = H, alkyl; R3R4N = ring], were prepd. Thus, 1-cyclopropyl-7-chloro-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid, 4-aminomethylpyrrolidin-3-one O-methylloxime bistrifluoroacetate, and DBU were refluxed in MeCN to give 85% 7-[(4-aminomethyl)-3-methoxyiminopyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid. The latter inhibited *Staphylococcus aureus* 6538p with a min. inhibitory concn. of 50.008 µg/mL.

IT 175461-35-5P 175461-36-6P 175461-37-7P  
175461-38-8P 175461-39-9P 175461-40-2P  
175461-41-3P 175461-42-4P 175461-43-5P  
175461-44-6P 175461-45-7P 175462-23-4P  
175462-31-4P 175462-32-5P 175462-33-6P  
175462-34-7P 175462-35-8P 175462-36-9P  
175462-37-0P 175462-38-1P 175462-39-2P  
175462-40-5P 175463-14-6P 175463-26-0P  
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210353-54-1P 210353-55-2P 210353-56-3P

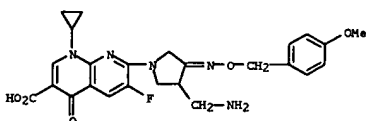
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 7-[(4-aminomethyl)-3-methoxyiminopyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid and related compds. as antibacterials)

RN 175461-35-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[(4-methoxyphenyl)methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175461-36-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[(4-methoxyphenyl)methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:104541 CAPLUS  
DOCUMENT NUMBER: 130:168355

TITLE: Preparation of 7-[(4-aminomethyl)-3-methoxyiminopyrrolidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid and related compounds as antibacterials.

INVENTOR(S): Hong, Chang Yong; Kim, Young Kwan; Kim, Se Ho; Chang, Jay Hyok; Choi, Hoon; Nam, Do Hyun; Kim, Ae Ri; Lee, Jin Hwar Park, Xi Sook  
LG Chemical Ltd., S. Korea  
U.S., 67 pp., Cont. of U.S. Ser. No. 490,978.

PATENT ASSIGNEE(S):  
SOURCE: U.S., 67 pp., Cont. of U.S. Ser. No. 490,978.

DOCUMENT TYPE: Patent

LANGUAGE: English

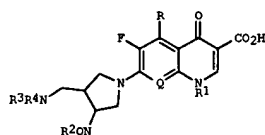
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5869670	A	19990209	US 1998-49024	19980327
KR 131999	B1	19980417	KR 1994-13604	19940616
KR 222082	B1	19991001	KR 1994-39915	19941230
KR 222083	B1	19991001	KR 1994-39930	19941230
CN 1114959	A	19960117	CN 1995-107008	19950615
CN 1058010	B	20001101		
US 5633262	A	19970527	US 1995-490978	19950615
RU 2120940	C1	19981027	RU 1995-109449	19950615
US 5775940	A	19980707	US 1997-825992	19970404
US 5962468	A	19991005	US 1998-188063	19981109
PRIORITY APPLN. INFO.:				
			KR 1994-13604	A 19940616
			KR 1994-39915	A 19941230
			KR 1994-39930	A 19941230
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			US 1997-825992	A2 19970404
			US 1998-49024	A1 19980327

OTHER SOURCE(S): MARPAT 130:168355

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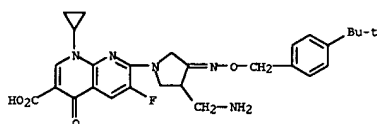


AB Title compds. [I; R = H, Me, amino; Q = CH, CF, CCl, COH, CMe, COMe, N; R1 = cyclopropyl, Et, fluorophenyl; R2 = H, alkyl, cyclopropyl,

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

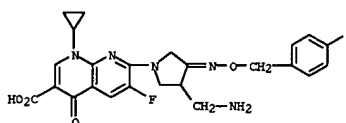
RN 175461-37-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[[[4-(1,1-dimethylethyl)phenyl]methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



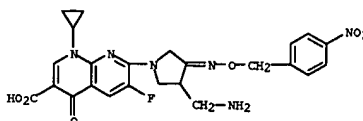
RN 175461-38-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[[[4-(fluorophenyl)methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175461-39-9 CAPLUS

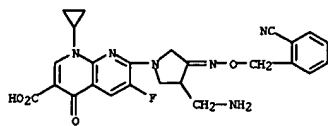
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[[[4-(nitrophenyl)methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



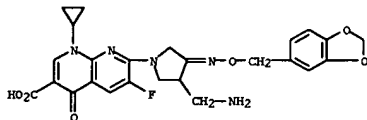
RN 175461-40-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-(aminomethyl)-4-[[[2-cyanophenyl)methoxyimino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

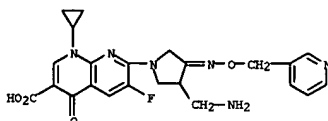
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-41-3 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,3-benzodioxol-5-ylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

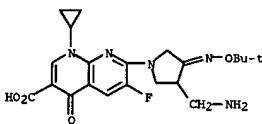


RN 175461-42-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((3-pyridinylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

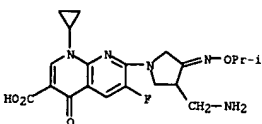


RN 175461-43-5 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((3-furanylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

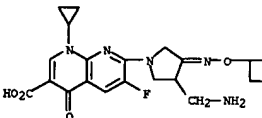
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-31-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1-methyl-1-ethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

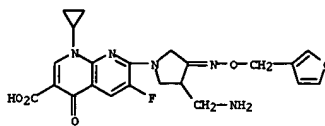


RN 175462-32-5 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1-cyclobutylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

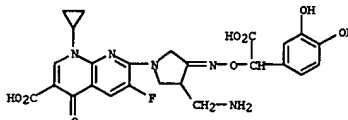


RN 175462-33-6 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1-cyclopentylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

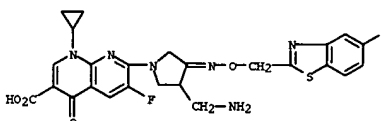
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-44-6 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,3-dihydroxyphenylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

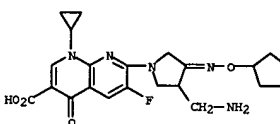


RN 175461-45-7 CAPLUS  
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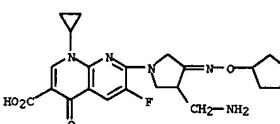


RN 175462-23-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,1-dimethyl-2-thiazolylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

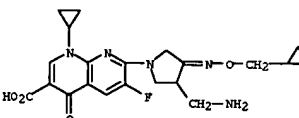
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-34-7 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,1-dimethyl-2-thiazolylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



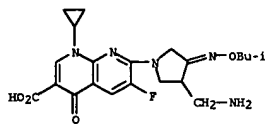
RN 175462-35-8 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,1-dimethyl-2-thiazolylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



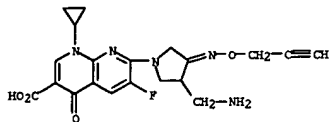
RN 175462-36-9 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,1-dimethyl-2-thiazolylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

10692640 6/6/06

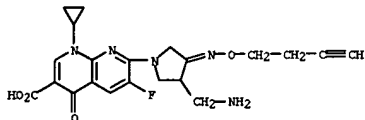
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-37-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((2-propynyloxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

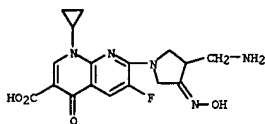


RN 175462-38-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((3-butyloxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

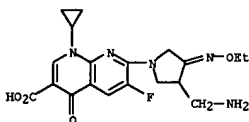


RN 175462-39-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((methoxymethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

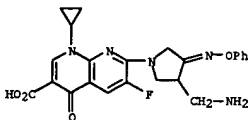
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175463-27-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((ethoxyimino)-1-pyrrolidinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175463-28-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((phenoxymethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



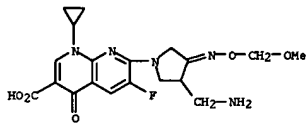
RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

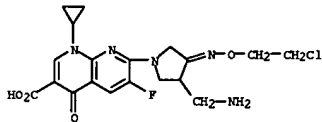
CRN 175463-14-6  
CMF C18 H20 F N5 O4

Double bond geometry as shown.

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

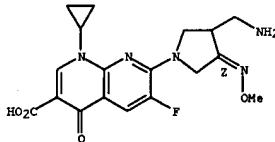


RN 175462-40-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((2-chloroethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



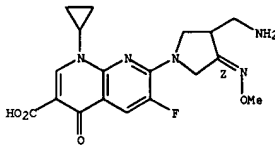
RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 175463-26-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-((hydroxyimino)-1-pyrrolidinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



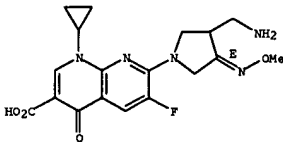
CM 2

CRN 75-75-2  
CMF C H4 O3 S



RN 210353-54-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 210353-55-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(3-aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, trihydrate (9CI) (CA INDEX NAME)

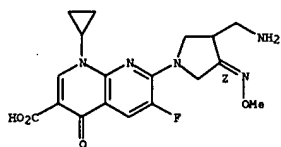
CM 1

CRN 175463-14-6  
CMF C18 H20 F N5 O4

Double bond geometry as shown.

10692640 6/6/06

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



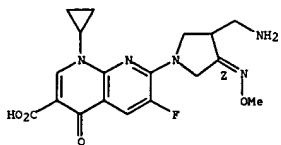
CM 2  
CRN 75-75-2  
CHF C H4 O3 S



RN 210353-56-3 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, hydrate (2:3) (9CI) (CA INDEX NAME)

CM 1  
CRN 175463-14-6  
CHF C18 H20 F N5 O4

Double bond geometry as shown.

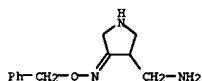


CM 2  
CRN 75-75-2

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



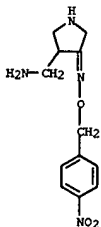
IT 175463-48-6P 175463-49-7P 175463-50-0P  
175463-51-1P 175463-52-2P 175463-53-3P  
175463-54-4P 175463-55-5P 175463-56-6P  
175463-57-7P 175463-58-8P 175463-70-4P  
175463-71-5P 175463-72-6P 175463-76-0P  
175463-77-1P 175463-78-2P 175463-79-3P  
175463-80-6P 175463-85-1P 175463-91-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 7-(4-aminomethyl-3-methoxyiminopyrrolidin-1-yl)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid and related compds. as antibacterials)  
RN 175463-48-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(phenylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

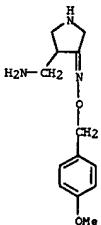
RN 175463-49-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-nitrophenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

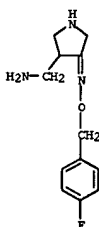
RN 175463-50-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-methoxyphenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

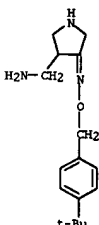
RN 175463-51-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-fluorophenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

RN 175463-52-2 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-(1,1-dimethylethyl)phenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

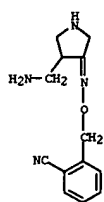


● 2 HCl

RN 175463-53-3 CAPLUS  
CN Benzonitrile, 2-[[[4-(aminomethyl)-3-pyrrolidinylidene]amino]oxy]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

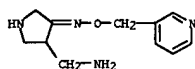
10692640 6/6/06

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

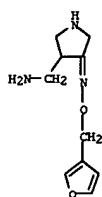
RN 175463-54-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(3-pyridinylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

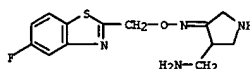
RN 175463-55-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(3-furanylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



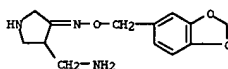
● 2 HCl

RN 175463-56-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(5-fluoro-2-benzothiazolyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

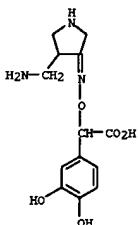
RN 175463-57-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(1,3-benzodioxol-5-ylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

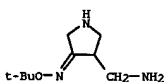
RN 175463-58-8 CAPLUS  
CN Benzenecetic acid, α-[[[4-(aminomethyl)-3-

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
pyrrolidinylidene]amino]oxy]-3,4-dihydroxy-, dihydrochloride (9CI) (CA INDEX NAME)



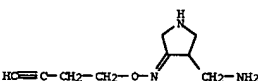
● 2 HCl

RN 175463-70-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(1,1-dimethylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

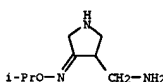
RN 175463-71-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-3-butynyloxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

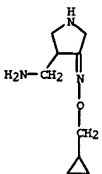
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 175463-72-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(1-methylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



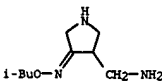
● 2 HCl

RN 175463-76-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(cyclopropylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

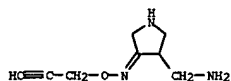
RN 175463-77-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(2-methylpropyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

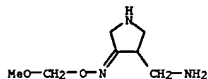
10692640 6/6/06

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)  
 RN 175463-78-2 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-2-propynyloxime, dihydrochloride  
 (9CI) (CA INDEX NAME)



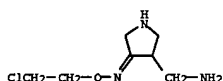
● 2 HCl

RN 175463-79-3 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(methoxymethyl)oxime, dihydrochloride  
 (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-80-6 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(2-chloroethyl)oxime, dihydrochloride  
 (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-85-1 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, bis(trifluoroacetate)  
 (9CI) (CA INDEX NAME)

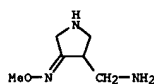
L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

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 CRN 175463-84-0  
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CH 2

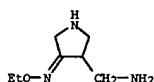
CRN 76-05-1  
 CHF C2 H F3 O2



RN 175463-91-9 CAPLUS  
 CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-ethyloxime, bis(trifluoroacetate)  
 (9CI) (CA INDEX NAME)

CH 1

CRN 175463-90-8  
 CHF C7 H15 N3 O



CH 2

CRN 76-05-1  
 CHF C2 H F3 O2

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:471466 CAPLUS  
 129:122580  
 DOCUMENT NUMBER:  
 TITLE: Preparation of quinoline(or naphthyridine)-3-carboxylic acids such as 7-(4-aminomethyl-3-methoxyiminopyrrolidin-1-yl)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid as antibacterials  
 INVENTOR(S): Hong, Chang Yong; Kim, Young Kwan; Kim, Se Ho; Chang, Jey Hyok; Choi, Hoon; Nam, Do Hyun; Kim, Ae Ri; Lee, Jin Hwa; Park, Ki Sook  
 PATENT ASSIGNEE(S): LG Chemical Ltd., S. Korea  
 SOURCE: U.S., 64 pp., Cont.-in-part of U. S. 5,633,262.  
 DOCUMENT TYPE: CODEN: USXXAM  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: English  
 PATENT INFORMATION: 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5776944	A	19980707	US 1997-825992	19970404
KR 131999	B1	19980417	KR 1994-13604	19940616
KR 222082	B1	19991001	KR 1994-39915	19941230
KR 222083	B1	19991001	KR 1994-39930	19941230
CN 1114959	A	19960117	CN 1995-107008	19950615
CN 1058010	B	20001101		
US 5633262	A	19970527	US 1995-490978	19950615
RU 2120940	C1	19981027	RU 1995-109449	19950615
US 5698570	A	19971216	US 1997-791749	19970130
US 5840916	A	19981124	US 1997-825991	19970404
US 5869670	A	19990209	US 1998-49024	19980327
US 5962468	A	19991005	US 1998-188063	19981109
PRIORITY APPLN. INFO.:			KR 1994-13604	A 19940616
			KR 1994-39915	A 19941230
			KR 1994-39930	A 19941230
			US 1995-490978	A2 19950615
			US 1997-825992	A2 19970404
			US 1998-49024	A1 19980327

OTHER SOURCE(S): MARPAT 129:122580  
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

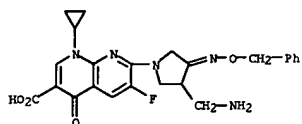
AB The title compds. [I; R = H, Me, NH2; Q = CH, CF, CCl, C(OH), C(Me), C(OMe), N; R1 = cyclopropyl, Et, (un)substituted Ph; R2 = H, Cl-4 alkyl, cyclopropyl, etc.; R3, R4 = H, Cl-3 alkyl; R3R4N = a ring], having an excellent antibacterial activity, were prepared. More specifically, the present invention relates to 7-(4-aminomethyl-3-methoxyiminopyrrolidin-1-yl)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid (II) or its isomers, which was prepared by reacting a quinolone III [X = halo] with a pyrrolidine oxime IV in the presence of an acid acceptor. (Z)-II isomer has a superior antibacterial activity to the (E)-II isomer (as the free form or as its methanesulfonate) with, e.g., MIC of  $\leq 0.008$   $\mu\text{g/mL}$  against *Staphylococcus aureus* 6538p.  
 IT 175461-35-5P 175461-36-6P 175461-37-7P  
 175461-38-8P 175461-39-9P 175461-40-2P

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

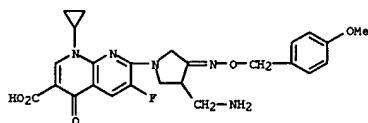
175461-41-3P 175461-42-4P 175461-43-5P  
 175461-44-6P 175461-45-7P 175462-23-4P  
 175462-31-4P 175462-32-5P 175462-33-6P  
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 175462-37-0P 175462-38-1P 175462-39-2P  
 175462-40-5P 175463-14-6P 175463-26-0P  
 175463-27-1P 175463-28-2P 210353-53-0P  
 210353-54-1P 210353-55-2P 210353-56-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of quinoline(or naphthyridine)-3-carboxylic acids as antibacterials)

RN 175461-35-5 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(phenylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

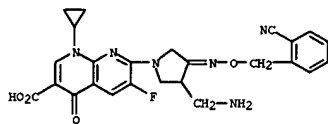


RN 175461-36-6 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(methoxyphenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

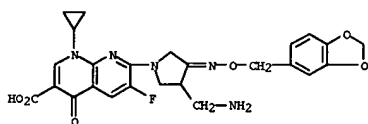


RN 175461-37-7 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(1,1-dimethylethyl)phenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

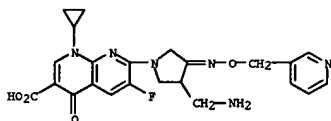
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-41-3 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(1,3-benzodioxol-5-ylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

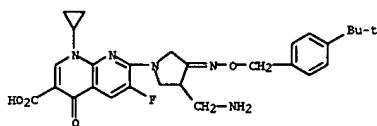


RN 175461-42-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(3-pyridinylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

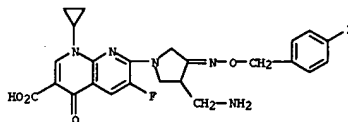


RN 175461-43-5 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(3-furanylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

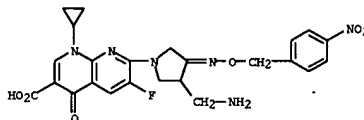
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-38-8 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(4-fluorophenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

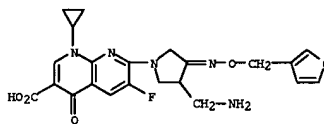


RN 175461-39-9 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(4-nitrophenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

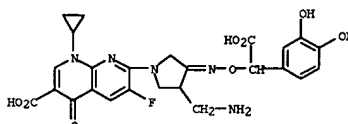


RN 175461-40-2 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(2-cyanophenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

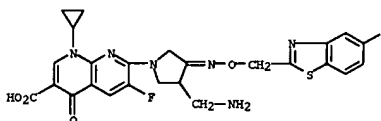
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-44-6 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(3,4-dihydroxyphenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



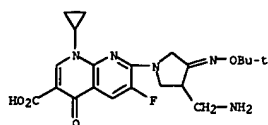
RN 175461-45-7 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(5-fluoro-2-benzothiazolyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



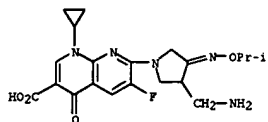
RN 175462-23-4 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(1,1-dimethylethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

10692640 6/6/06

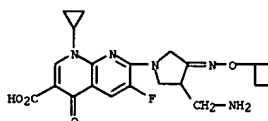
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-31-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(1-methylethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

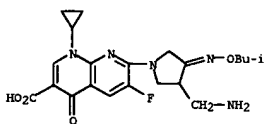


RN 175462-32-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(cyclobutylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

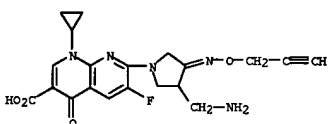


RN 175462-33-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(cyclopentylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

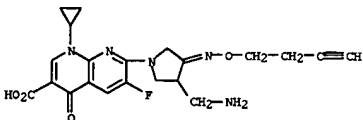
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-37-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(2-propynylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

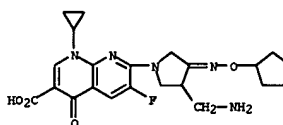


RN 175462-38-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(3-butenylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

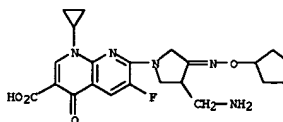


RN 175462-39-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(methoxymethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

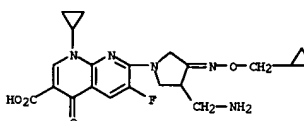
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-34-7 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[[tetrahydro-3-furanyl]oxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

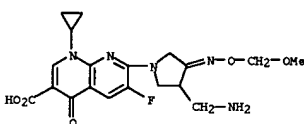


RN 175462-35-8 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(cyclopropylmethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

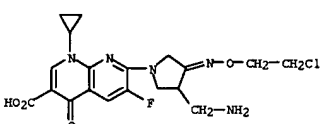


RN 175462-36-9 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(2-methylpropoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

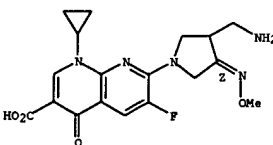


RN 175462-40-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(2-chloroethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

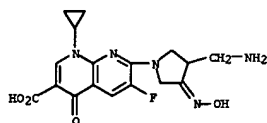


RN 175463-26-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(hydroxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

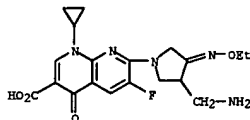


10692640 6/6/06

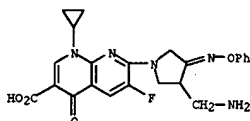
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175463-27-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(ethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175463-28-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(phenoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 210353-53-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate (9CI) (CA INDEX NAME)

CH 1

CRN 175463-14-6

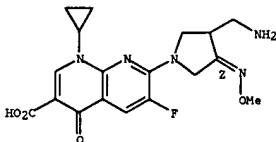
CMF C18 H20 F N5 O4

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CRN 175463-14-6

CMF C18 H20 F N5 O4

Double bond geometry as shown.



CH 2

CRN 75-75-2

CMF C H4 O3 S



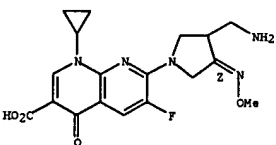
RN 210353-56-3 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, hydrate (2:3) (9CI) (CA INDEX NAME)

CH 1

CRN 175463-14-6

CMF C18 H20 F N5 O4

Double bond geometry as shown.



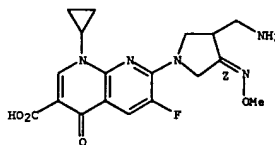
CH 2

CRN 75-75-2

Page 25 saeed

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Double bond geometry as shown.



CH 2

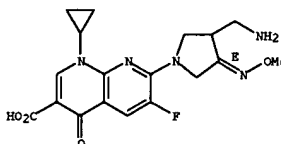
CRN 75-75-2

CMF C H4 O3 S



RN 210353-54-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4E)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 210353-55-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, monomethanesulfonate, trihydrate (9CI) (CA INDEX NAME)

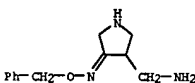
CH 1

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CMF C H4 O3 S



IT 175463-48-6P 175463-49-7P 175463-50-0P  
175463-51-1P 175463-52-2P 175463-53-3P  
175463-54-4P 175463-55-5P 175463-56-6P  
175463-57-7P 175463-58-8P 175463-70-4P  
175463-71-5P 175463-72-6P 175463-76-0P  
175463-77-1P 175463-78-2P 175463-79-3P  
175463-80-6P 175463-85-1P 175463-91-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of quinoline(or naphthyridine)-3-carboxylic acids as antibacterials)  
RN 175463-48-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(phenylmethyl)oxime], dihydrochloride (9CI) (CA INDEX NAME)

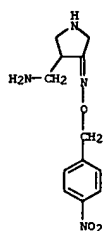


•2 HCl

RN 175463-49-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-nitrophenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

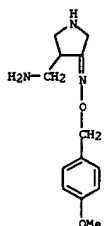
10692640 6/6/06

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

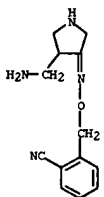
RN 175463-50-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-methoxyphenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

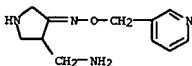
RN 175463-51-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-fluorophenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

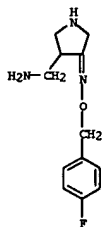
RN 175463-54-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(3-pyridinylmethyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

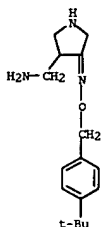
RN 175463-55-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(3-furanylmethyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

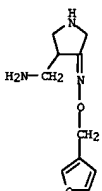
RN 175463-52-2 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-(1,1-dimethylethyl)phenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

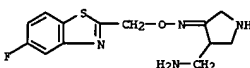
RN 175463-53-3 CAPLUS  
CN Benzotrile, 2-[[[4-(aminomethyl)-3-pyrrolidinylidene]amino]oxy]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



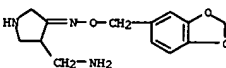
● 2 HCl

RN 175463-56-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(5-fluoro-2-benzothiazolyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-57-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(1,3-benzodioxol-5-yl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

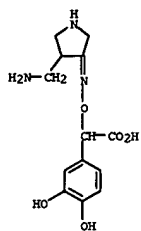


● 2 HCl

RN 175463-58-8 CAPLUS  
CN Benzeneacetic acid, α-[[[4-(aminomethyl)-3-pyrrolidinylidene]amino]oxy]-3,4-dihydroxy-, dihydrochloride (9CI) (CA INDEX NAME)

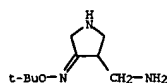
10692640 6/6/06

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



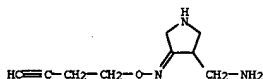
● 2 HCl

RN 175463-70-4 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(1,1-dimethylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



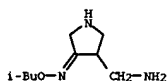
● 2 HCl

RN 175463-71-5 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-3-butynyloxime, dihydrochloride (9CI) (CA INDEX NAME)



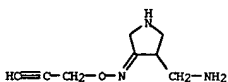
● 2 HCl

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



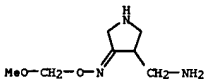
● 2 HCl

RN 175463-78-2 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-2-propynyloxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-79-3 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(methoxymethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

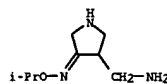


● 2 HCl

RN 175463-80-6 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(2-chloroethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

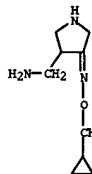
L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 175463-72-6 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(1-methylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

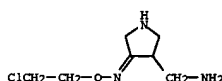
RN 175463-76-0 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(cyclopropylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-77-1 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-(2-methylpropyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

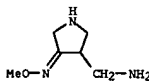


● 2 HCl

RN 175463-85-1 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-methyloxime, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CH 1

CRN 175463-84-0  
CHP C5 H13 N3 O



CH 2

CRN 76-05-1  
CHP C2 H F3 O2

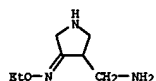


RN 175463-91-9 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)oxy)-, O-ethyloxime, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CH 1

CRN 175463-90-8  
CHP C7 H15 N3 O

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

CRN 76-05-1  
CMF C2 H F3 O2

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:638458 CAPLUS

DOCUMENT NUMBER: 127:307319

TITLE: Novel Fluoroquinolone Antibacterial Agents Containing Oxime-Substituted (Aminomethyl)pyrrolidines: Synthesis and Antibacterial Activity of 7-(4-(Aminomethyl)-3-(methoxyimino)pyrrolidin-1-yl)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydro[1,8]naphthyridine-3-carboxylic Acid (LB20304)

AUTHOR(S): Hong, Chang Yong; Kim, Young Kwan; Chang, Jay Hyok; Kim, Se Ho; Choi, Hoon; Nam, Do Hyun; Kim, Yong Zu; Kwak, Jin Hwan

CORPORATE SOURCE: Biotech Research Institute, LG Chem Research Park, Tae-Jon, 305-380, S. Korea

SOURCE: Journal of Medicinal Chemistry (1997), 40 (22), 3584-3593

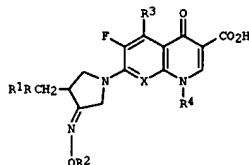
CODEN: JMCHAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Title compds. 1 [X = CF, CCl, CH, COMe, N, R, R1 = H, Me; R2 = Me, Pr, CHMe2, CMe3, CH2Ph, Ph; R3 = H, NH2; R4 = Et, cyclopropyl, 2,4-F2C6H3] were prepared from the quinolone and the pyrrolidinone fragments. These fluoroquinolones possess potent antimicrobial activity against both Gram-neg. and Gram-pos. organisms, including methicillin-resistant *Staphylococcus aureus* (MRSA). The activity imparted to the substituted quinolone nucleus by the C-8 substituent was in the order F (C5-NH2) > F (C5-H) > naphthyridine > Cl = OMe = H against Gram-pos. organisms. In the case of Gram-neg. strains, activity was in the order F (C5-NH2) > naphthyridine = F (C5-H) > H > Cl > OMe. The advantages provided by the newly introduced oxime group of the quinolones were clearly demonstrated by their comparison to a desoximino compound. In addition, the oxime moiety greatly improved the pharmacokinetic parameters of the novel quinolones. LB20304 (I, X = N, R, R1, R3 = H, R2 = Me, R4 = cyclopropyl) showed the best in vivo efficacy and pharmacokinetic profile in animals, as well as good phys. properties.

IT 175463-14-6P 197143-43-4P 197143-44-5P

197143-45-6P 197143-46-7P 197143-47-8P

L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

197143-48-9P 197143-49-0P 197143-50-3P

197143-51-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

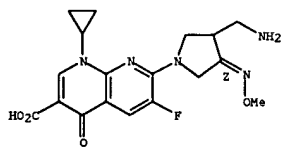
(prepn. of antibacterial aminomethyl(oximino)pyrrolidinylquinolones)

RN 175463-14-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-

(9CI) (CA INDEX NAME)

Double bond geometry as shown.

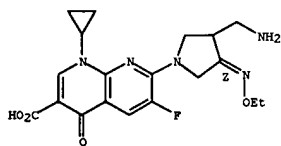


RN 197143-43-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[(4Z)-3-(aminomethyl)-4-(ethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-

(9CI) (CA INDEX NAME)

Double bond geometry as shown.

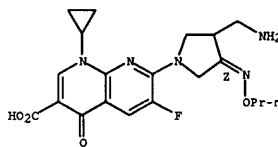


RN 197143-44-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(propoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

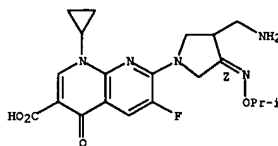
L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 197143-45-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(1-methylethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

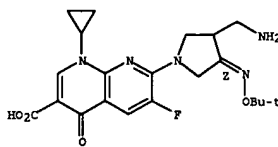
Double bond geometry as shown.



RN 197143-46-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(1,1-dimethylethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



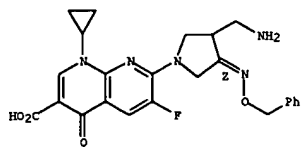
RN 197143-47-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(phenylmethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

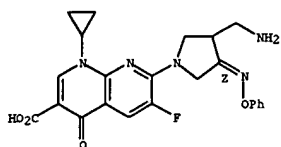
10692640 6/6/06

L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



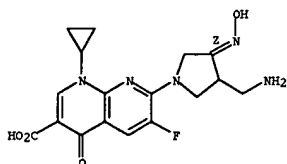
RN 197143-48-9 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(phenoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



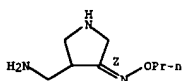
RN 197143-49-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(hydroxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 197143-50-3 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[3-(methoxymino)-4-[(methylamino)methyl]-1-pyrrolidinyl]-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

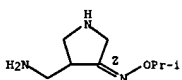
L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

RN 197143-53-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(1-methylethyl)oxime, dihydrochloride, (Z)- (9CI) (CA INDEX NAME)

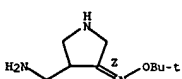
Double bond geometry as shown.



● 2 HCl

RN 197143-54-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(1,1-dimethylethyl)oxime, dihydrochloride, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● 2 HCl

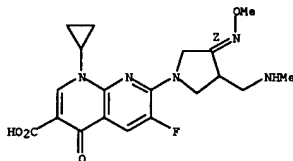
RN 197143-55-8 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(phenylmethyl)oxime, dihydrochloride, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

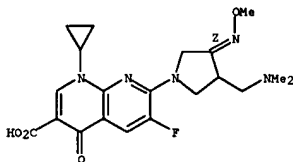
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 197143-51-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 1-cyclopropyl-7-[3-(dimethylamino)methyl]-4-(methoxymino)-6-fluoro-1,4-dihydro-4-oxo-, (Z)- (9CI) (CA INDEX NAME)

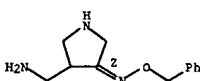
Double bond geometry as shown.



IT 197143-52-5 197143-53-6 197143-54-7  
197143-55-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of antibacterial  
aminomethyl (oximino)pyrrolidinylquinolinones)  
RN 197143-52-5 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-propyloxime, dihydrochloride, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

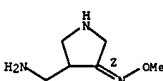
L7 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

IT 197143-35-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of antibacterial  
aminomethyl (oximino)pyrrolidinylquinolinones)  
RN 197143-35-4 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, dihydrochloride, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● 2 HCl

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:237481 CAPLUS

DOCUMENT NUMBER: 124:289515

TITLE: Preparation of novel 7-[(4-aminomethyl-3-alkoxyimino)pyrrolidin-1-yl]quinoline-3-carboxylic acid derivatives as antibacterial agents

INVENTOR(S): Kwak, Jin Hwan; Jeong, Yi Na; Oh, Jeong In

PATENT ASSIGNEE(S): LG Chemical Ltd., S. Korea

SOURCE: Eur. Pat. Appl., 92 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

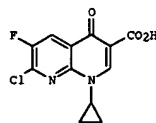
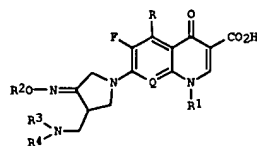
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 688772	A1	19951227	EP 1995-250143	19950614
EP 688772	B1	19990506		
R: CH, DE, DK, FR, GB, IT, LI, NL, SE				
KR 131999	B1	19980417	KR 1994-13604	19940616
KR 222082	B1	19991001	KR 1994-39915	19941230
KR 222083	B1	19991001	KR 1994-39930	19941230
CA 2151890	AA	19951217	CA 1995-2151890	19950615
CA 2151890	C	19990112		
CN 1114959	A	19960117	CN 1995-107008	19950615
CN 1058010	B	20001101		
JP 08041050	A2	19960213	JP 1995-149125	19950615
JP 2742248	B2	19980422		
RU 2120940	C1	19981027	RU 1995-109449	19950615
PRIORITY APPLM. INFO.:			KR 1994-13604	A 19940616
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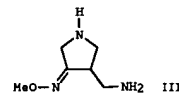
OTHER SOURCE(S): MARPAT 124:289515

GI

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



II



III

AB Title compds. I [Q = CH, CF, CCl, C(OH), C(Me), C(OMe), N; R = H, Me, NH<sub>2</sub>; R1 = cyclopropyl, Et, fluoro-substituted phenyl; R2 = H, Cl-C4 alkyl, C3-C6 alkynyl, (substituted) benzyl, etc.; R3, R4 = H, Cl-C3 alkyl, etc.] were prepared. Reaction of II with III. 2CF<sub>3</sub>COOH in the presence of 1,8-diazabicyclo[5.4.0]undec-7-ene in MeCN under reflux afforded 85% I [Q = N; R, R3, R4 = H; R1 = cyclopropyl; R2 = Me] which showed MIC of ≤0.008 µg/mL against Staphylococcus aureus 6538p, Staphylococcus aureus giorgio and Staphylococcus epidermidis 178 vs. 0.25 µg/mL with Ofloxacin.

IT 175461-35-5P 175461-36-6P 175461-37-7P

175461-38-8P 175461-39-9P 175461-40-2P

175461-41-3P 175461-42-4P 175461-43-5P

175461-44-6P 175461-45-7P 175462-23-4P

175462-31-4P 175462-32-5P 175462-33-6P

175462-34-7P 175462-35-8P 175462-36-9P

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175462-40-5P 175463-14-6P 175463-26-0P

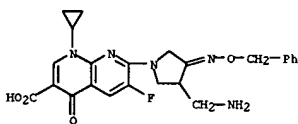
175463-27-1P 175463-28-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) [preparation of novel 7-[(4-aminomethyl-3-alkoxyimino)pyrrolidin-1-yl]quinoline-3-carboxylic acid derivs. as antibacterial agents]

RN 175461-35-5 CAPLUS

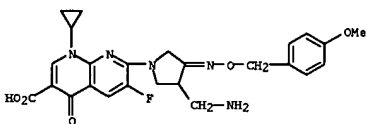
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-methoxyphenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



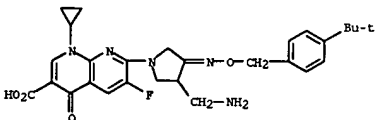
RN 175461-36-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-methoxyphenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175461-37-7 CAPLUS

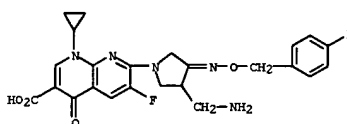
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-(1,1-dimethylethyl)phenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 175461-38-8 CAPLUS

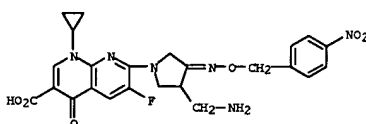
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[4-fluorophenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



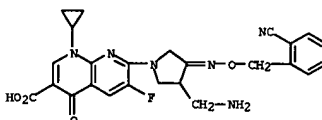
RN 175461-39-9 CAPLUS

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RN 175461-40-2 CAPLUS

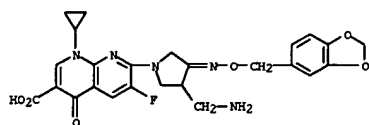
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[2-cyanophenyl)methoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



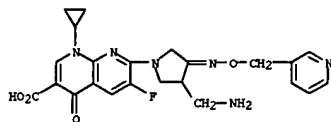
RN 175461-41-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[[1,3-benzodioxol-5-ylmethoxy]imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

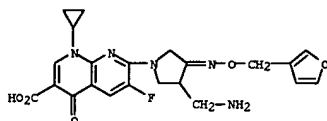
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-42-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((3-pyridinylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

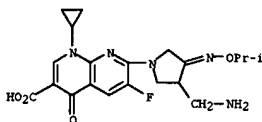


RN 175461-43-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((3-furanylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

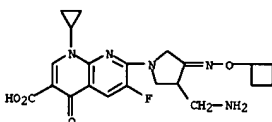


RN 175461-44-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((3,4-dihydroxyphenylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

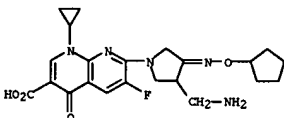
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-32-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((cyclobutylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

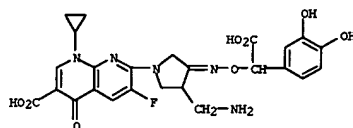


RN 175462-33-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((cyclopentylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

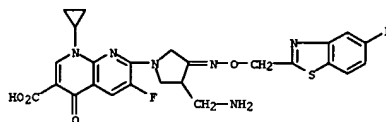


RN 175462-34-7 CAPLUS  
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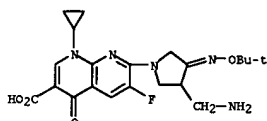
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175461-45-7 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(((5-fluoro-2-benzothiazolyl)methoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

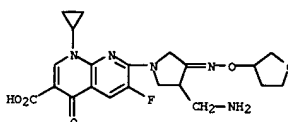


RN 175462-23-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((1,1-dimethylethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

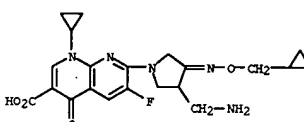


RN 175462-31-4 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((tert-butylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

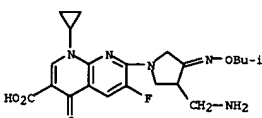
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-35-8 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((cyclopropylmethoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



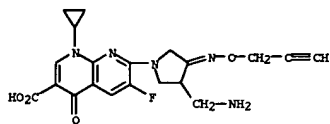
RN 175462-36-9 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((2-methylpropoxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



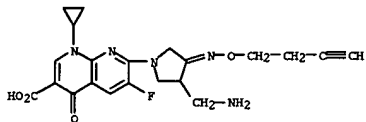
RN 175462-37-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-((2-propynyloxy)imino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

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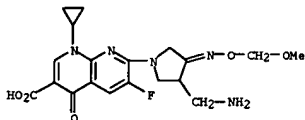
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175462-38-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(3-butenyloxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

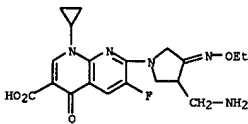


RN 175462-39-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(methoxymethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

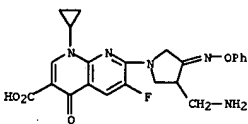


RN 175462-40-5 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(2-chloroethoxy)imino]-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

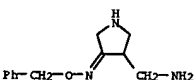
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 175463-28-2 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-(phenoxymino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



IT 175463-48-6P 175463-49-7P 175463-50-0P  
175463-51-1P 175463-52-2P 175463-53-3P  
175463-54-4P 175463-55-5P 175463-56-6P  
175463-57-7P 175463-58-8P 175463-70-4P  
175463-71-5P 175463-72-6P 175463-76-0P  
175463-77-1P 175463-78-2P 175463-79-3P  
175463-80-6P 175463-85-1P 175463-91-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of novel 7-[(4-aminomethyl-3-alkoxyimino)pyrrolidin-1-yl]quinoline-3-carboxylic acid derivs. as antibacterial agents)  
RN 175463-48-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(phenylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

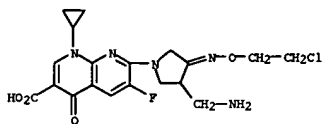


●2 HCl

RN 175463-49-7 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-nitrophenyl)methyl]oxime,

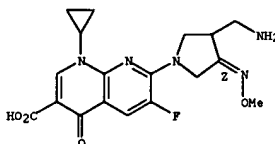
Page 32 saeed

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

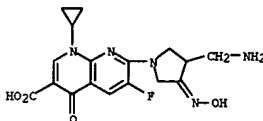


RN 175463-14-6 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(4Z)-3-(aminomethyl)-4-(methoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

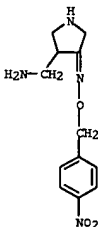


RN 175463-26-0 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(hydroxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



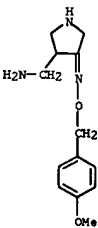
RN 175463-27-1 CAPLUS  
CN 1,8-Naphthyridine-3-carboxylic acid, 7-[3-(aminomethyl)-4-[(ethoxyimino)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



●2 HCl

RN 175463-50-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-methoxyphenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



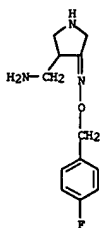
●2 HCl

RN 175463-51-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-[(4-fluorophenyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



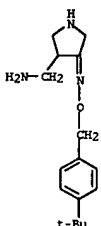
10692640 6/6/06

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

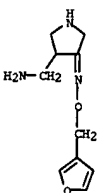
RN 175463-52-2 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-[[4-(1,1-dimethylethyl)phenyl]methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

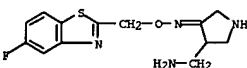
RN 175463-53-3 CAPLUS  
CN Benzotriazole, 2-[[[4-(aminomethyl)-3-pyrrolidinylidene]amino]oxy]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



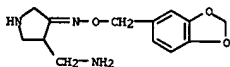
● 2 HCl

RN 175463-56-6 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-[(5-fluoro-2-benzothiazolyl)methyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

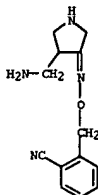
RN 175463-57-7 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-(1,3-benzodioxol-5-ylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

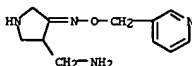
RN 175463-58-8 CAPLUS  
CN Benzenecetic acid, α-[[[4-(aminomethyl)-3-pyrrolidinylidene]amino]oxy]-3,4-dihydroxy-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● 2 HCl

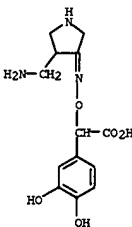
RN 175463-54-4 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-(3-pyridinylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

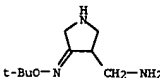
RN 175463-55-5 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-(3-furanylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



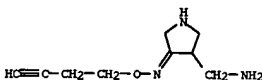
● 2 HCl

RN 175463-70-4 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-(1,1-dimethylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 175463-71-5 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-3-butynyl]oxime, dihydrochloride (9CI) (CA INDEX NAME)

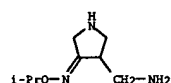


● 2 HCl

RN 175463-72-6 CAPLUS  
CN 3-Pyrrolidinone, 4-((aminomethyl)-, O-(1-methylethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)

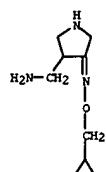
10692640 6/6/06

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



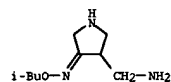
●2 HCl

RN 175463-76-0 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(cyclopropylmethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

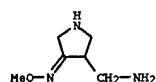
RN 175463-77-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(2-methylpropyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CH 1  
CRN 175463-84-0  
CMF C6 H13 N3 O



CH 2

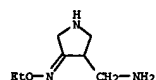
CRN 76-05-1  
CMF C2 H F3 O2



RN 175463-91-9 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-ethyloxime, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CH 1

CRN 175463-90-8  
CMF C7 H15 N3 O



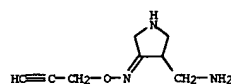
CH 2

CRN 76-05-1  
CMF C2 H F3 O2



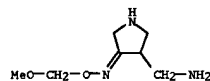
L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 175463-78-2 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-2-propynyloxime, dihydrochloride (9CI) (CA INDEX NAME)



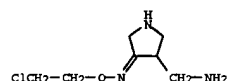
●2 HCl

RN 175463-79-3 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(methoxymethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 175463-80-6 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-(2-chloroethyl)oxime, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 175463-85-1 CAPLUS  
CN 3-Pyrrolidinone, 4-(aminomethyl)-, O-methyloxime, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)